

-2-

REMARKS

Claims 1-13 are pending in the application. Acceptance is respectfully requested.

Telephonic Interview

The Applicant thanks Examiner Eashoo for a helpful telephone interview on June 22, 2004. In that interview, the Examiner indicated that subject to further review, the claims appeared to distinguish the cited prior art.

35 U.S.C. § 112 Rejection

Claims 2, 5 and 8 have been rejected under 35 U.S.C. § 112 as being indefinite for failing to point out and distinctly claim the subject matter which the applicant regards as the invention in that the claims recite a limitation directed to the apparatus while it is in use rather than a positively stated description of a portion of the apparatus. In addition, the Examiner states the location of the melt in the apparatus when it is to be in solid shape is unclear.

In Applicant's apparatus, the primary flowing melt is of a solid shape, starting from the primary extruder through the co-extrusion assemblies. The shape of the melt is transformed by spider pipe heads and/or die assemblies into a desired form. (See Specification at page 4, lines 7-8 and page 5, lines 1-9). Hence, the Applicant makes clear in the Specification when the melt is to be of a solid shape. Applicant respectfully requests the withdrawal of the rejections of Claims 2, 5 and 8 under 35 U.S.C. § 112.

35 U.S.C. § 102 Rejection

Claims 1-3 and 13 have been rejected under 35 U.S.C. 102(b) as being anticipated by Wissmann et al. (U.S. Pat. 5,616,350, hereinafter "Wissmann").

The present invention provides for an improved system by which to co-extrude simultaneous melts. In general, the system includes a primary extruder and primary flow director and a secondary extruder and secondary flow director, through which each divides the melt into two symmetrical flow paths. Co-extrusion assemblies co-extrude the melts simultaneously from

-3-

the flow directors, the then co-extruded solid melt is received by either spider pipe heads and/or an extrusion die set. The introduction of the melt before the spider pipe heads and/or the dies results in two advances over previous designs: 1)the melt remains solid until introduced into the spider pipe heads and extrusion dies and 2)it eliminates the occurrence of substantial pressure change in the melt. Both of these effects result in an even, uniform flow of the melt, which in turn leads to a higher quality and more consistent application to an extrusion. (See Specification at page 5, lines 1-5).

Wissmann provides a dual flow divider for use on an extrusion system. The divider separates first and second melt streams from respective first and second extruders. The melt from the first extruder enters a set of dies which provide a defined profile configuration. The melt from the second extruder is applied to the outer surface of the melt from the first extruder at the end of the set of dies. Wissmann does not teach how the melt from the second extruder is applied to the melt of the first extruder.

Wissmann does not introduce the co-extrusion process before the die assemblies. Further, Wissmann does not teach how to apply the melt from the second extruder to the melt of the first extruder. Therefore, Wissmann does not anticipate, teach, or otherwise suggest "at least first and second co-extrusion assemblies, each for co-extruding melt from one of the flow paths from each of the primary and secondary flow directors with no substantial pressure change in the melt; and dies receiving melt from respective co-extrusion assemblies" as claimed in the present invention in Claim 1. Nor does Wissmann teach "means for combining the primary and secondary melt flows into co-extruded melt flows in a region with no substantial pressure change in the melt; and means for shaping the respective co-extruded melt flows" as claimed in the present invention in Claim 13. Applicant respectfully requests the withdrawal of the rejections of Claims 1 and 13 under 35 U.S.C. § 102(b).

Claims 2 and 3 are dependent on Claim 1 and are allowable for the same reasons. Therefore, Applicant respectfully requests withdrawal of the rejection of Claims 2 and 3.

35 U.S.C. § 103 Rejection

Claims 4-9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Wissmann in view of Hacke (U.S. Pat. 4,076,477, hereinafter "Hacke").

Hacke provides a multiple extrusion system. The system includes a single barrel extruder, a manifold, and two die assemblies. The manifold separates the melt from the single barrel extruder into two streams. The two streams enter respective dies and are shaped to a desired profile.

As argued above with respect to Claims 1 and 13, Wissmann does not teach the co-extrusion process before entering spider pipe heads and/or die assemblies. Further, Wissmann does not teach how to apply the melt from the second extruder to the melt of the first extruder. Therefore, the combination of Hacke and Wissmann also would not teach, suggest, or otherwise make obvious Applicant's claimed invention. Applicant respectfully requests the withdrawal of the rejections of Claims 4 and 7 under 35 U.S.C. § 103(a).

Claims 5-6 and 8-9 are dependent on Claims 4 and 7 respectively and are allowable for the same reasons. Therefore, Applicant respectfully requests withdrawal of the rejection of Claims 5, 6, 8, and 9.

-5-

**CONCLUSION**

In view of the above remarks and the Examiner's statements in the telephone interview that the above remarks would make the application allowable, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By 

Joseph M. Maraia

Registration No. 55,926

Telephone: (978) 341-0036

Facsimile: (978) 341-0136

Concord, MA 01742-9133

Dated: 6/22/04